Rule 21 Working Group Meeting #42 – Revised Agenda March 19, 2003 Southern California Edison 7951 Redwood Drive Fontana, CA 92335 9:30 am – 4:00 pm

Combined Group Discussion (Approximately 9:30 am to 10:30 am)

 Introductions, General Housekeeping, & Next Meeting Location Next Meeting: April 21 in Sacramento

In attendance:

Pat Gary	Aldridge Brown	SCE California ISO	626-302-4617 (916) 608-5715	Pat.Aldridge@sce.com glbrown@caiso.com
Petrina	Burnham	SDG&E	858-654-1712	pburnham@semprautilities.com
Bill	Cook	SDG&E	(858) 654-1189	wcook@semprautilities.com
Crisman	Cooley	Overdomain SCE	(805) 683-0938	ccooley@overdomain.com
Tom	Dossey Dowiak		(626) 302-8242 856-439-9998	dosseyt@sce.com
Dan		Ingersoll-Rand Energy Systems		Dan_Dowiak@irco.com
Michael	Edds	Overdomain	(760) 409-3404	in m.edds@ieee.org
Paul	Fukumoto	Ingersoll-Rand Energy Systems	714.799.7742	Paul_Fukumoto@irco.com
Susan	Gardner	Redhawk Energy Consultants	760-434-6771	sgardner@redhawkenergy.com
Ed	Grebel	SCE	(626) 302-8526	grebelej@sce.com
Mike	lammarino	SDG&E	(858) 650-6166	miammarino@semprautilities.com
Karl	lliev	SDG&E	858-654-1709	kiliev@semprautilities.com
Jerry	Jackson	PG&E	(415) 973-3655	grj4@pge.com
Scott	Lacy	SCE	(909) 357-6589	lacysr@sce.com
Kelly	Mack	Tecogen	781-466-6401	kmack@tecogen.com
Anthony	Mazy	CPUC/ORA	(415) 703-3036	amazy@cpuc.ca.gov
Randy	Minnier	MPE Consulting	858-578-4788	randy@mpeconsulting.com
Peter	Moreno	SCE	626-302-9597	morenopf@sce.com
Mark	Moser	RCM Digesters	510-658-4466	in mmoser@rcmdigesters.com
Bob	Panora	Tecogen	781-466-6401	bpanora@tecogen.com
Edan	Prabhu	Reflective Energies	(949) 380-4899	edanprabhu@cox.net
Dave	Redding	Riverside Public Utilities	(909) 826-5411	in dredding@ci.riverside.ca.us
Joe	Simpson	Joe Simpson	949-361-1495	in simpsonjw@cox.net
Jim	Skeen	SMUD	(916) 732-5305	jskeen@smud.org
Jon	Smithers	RealEnergy	818-610-2544	smithers@realenergy.com
Scott	Tomashefsky	California Energy Commission	(916) 654-4896	stomashe@energy.state.ca.us
Dan	Tunnicliff	SCE	626-302-1971	daniel.tunnicliff@sce.com
Mohammad	Vaziri	PG&E	510-874-2535	myv1@pge.com
Chuck	Whitaker	Endecon Engineering	(925) 552-1330	chuckw@endecon.com
Chris	Wirth	EMC	909-422-0680	chris.wirth@agrihouse.com

- Scott asked the working group to make comments in a professional manner, not a personal manner. A commenter may be asked not to attend the meeting or meetings if he or she persists in making personal comments.
- Scott has worked up a Rule 21 Process Sheet to show explicitly what the working group is doing; this is both for participants, their executives, and for the Commissioners of the Energy Commission. The working group will continue to revise this list.
- Jerry J. will send PG&E materials electronically to Crisman C. for distribution to those members of the working group who weren't present in Fontana for the meeting.
- Question whether participants see value in having R21 meetings continue. Moh V. requested a structure of objectives, work toward objectives, and assessment of reaching objectives. Scott said that's what we're now doing in the Rule 21 Process Sheet. Edan P. asked participants to write 5 lines about what's right & wrong with the process. Request

by Tony M. to distinguish between concerns/issues versus problems requiring solutions. Bin lists have priority levels to address status of problems/solutions.

• Utility Status Report Updates
PG&E now has expanded their reporting, with Enet, Expanded Enet, and non-Enet (Rule
21) projects all shown.

- Technical Group Updates
 - IEEE P1547: Timing for Reviewing P1547 Adoption Impact on Rule 21 Reballot passed with 91% approval; publishing expected this summer. Request by Edan P. suggests comparing Rule 21 with P1547 and note differences; where thresholds of 1547 are higher/lower than Rule 21, these should be noted, with recommendations. Tony M. says CPUC considers Rule 21 "interim" to be replaced by national standards when available. Chuck W. says Rule 21 is more specific in some instances. Changes from 1547 will go onto technical bin list. A small group will look at these issues, headed by Chuck.
 - Rule 21 Certification Issues
 - Tecogen Certification Update
 - Is There a Need to Revise Certification Process?
 - 1. Clarify certification process for vendors
 - 2. Clarify process for the working group
 - 3. Further define the certification process Certification applies to screen 3 in the Initial Review Process.
 - Documenting Certification Process
 - What About Creating a Decertification Process?

 This will be treated as part of the Certification process.
 - Supplemental Guideline Update

Document is on the CEC website now.

Proposed change to Guideline has been circulated, comments are coming in from the technical working group. Jerry J. brings an example of possible DG export to the grid; sensing a drop in the load can reduce generation using the customer's Energy Management System. This is a non-hardware interim solution that is acceptable in the absence of a modification to the export screen. This is an example, Jerry J. says, of a need for flexibility in Rule 21 to allow interim solutions that solve the problem of inadvertent export; this flexibility is already a part of the export screen. Ed G. expresses concern that utilities would have to bring every solution to the group for approval. Tom D. says Rule 21 Section D allows utility & customer to come to any agreement they wish in regard to the requirements.

- Regulatory Issues:
 - CPUC Proceeding Update
 - CPUC Decision 03-02-068: Final CPUC DG Policy Decision Says outstanding policy issues will be handled in a new proceeding. As Rule 21 group develops policy issue list, the issues could be handled potentially in the new proceeding.
 - R.02-01-011: Proposed Decision on Departing Load Exit Fees A determination is upcoming April 3.
 - So What Happens Next?
 - Standby: legislation out to extend current standby rules to 2005.

Petrina B. passed out a copy of Proposed Decision 353.13 from ALJ Cooke 3-17-2003: "...combined heat and power applications and renewable resources...5MW or smaller installed between May 2001 and Dec 31, 2004, shall be served under the same rates as customers with similar load profiles that do not install distributed generation. ...same treatment shall be given to ultra-clean resources, as defined in P.U.Code 353.2(b), sized 5MW or smaller, installed between Jan1, 2003 and Dec31, 2005." Tariffs would be in effect until 2011. Costs and benefits will be tracked to assign net costs.

- Update on FERC ANOPR No change.
- FOCUS Team Projects
 - DG Monitoring Study Update
 - Website: www.dgmonitors.com:81/ion within several weeks, the extension will be dropped to www.dgmonitors.com
 - Within 2 weeks AMD Sunnyvale will be up and running. Must redo wireless ethernet to allow communication with the site.
 - Data review will begin soon.
 - San Diego up and running; DG to be installed.
 - Irvine running.
 - Southgate running.
- New Business (To Begin Discussion with Action at Future Date)
 Glossary of Terms: A Report from the Definition Subcommittee
 Jerry J. put out a list of potential terms to define. This would be a glossary of terms of common usage (as opposed to contractual or rule language). Werner said that some R21 definitions are unclear and need to be redefined. Those changes could be combined with changes to Sections I & J in a new filing.
 - Opportunity to Raise Issues to Discuss at Future Meetings See Meeting Process below.
 - Refining the Dispute Resolution Process (Is There a Need?) Non-tech group added this to the bin list.
 - Improving the Rule 21 Working Group Process (Non-Tech Assignment?)

Recommended Rule 21 Working Group Meeting Process

The Working Group Meetings will be managed using Action Items. An Action Item list will define the active issues, the volunteer (champion) responsible for developing and compiling input, and the time frame in which the issue is expected to be resolved.

Item Prioritization

In order to establish each issue clearly, and to set up a clear course of action for each issue, the following process will be used:

For each issue, three priorities are defined: High, Low and Inactive or informational. To be given a High or Low Priority, an item must

- have an accompanying written proposal
- a champion willing to prepare text and coordinate input from others

High or Low Priority status will be determined by show of hands of the participants present at the meeting. High Priority items will be given a deadline for completion. Low priority items will only be discussed at meetings after all of the High priority items have been discussed.

Action Items that do not have both a written proposal and a designated champion will be considered Inactive.

Meeting Format

At the beginning of each meeting, we will review the agenda, which will be based on submitted information as discussed below.

Next, we will review the Action Item List and any suggestions for new items. Prioritization will be established for new items as well as re-prioritization of existing items that are past their due dates.

Input for Action Items should be submitted for distribution at least 5 working days prior to the meeting date. Input received after that will be placed at the end of the agenda.

Each item will be given a 30-minute discussion time. At the end of the discussion, the item Champion will summarize the discussion, intended goal and any action items. Additional time may be allowed with the consensus of the group.

If all of the high priority items have been covered, and there is remaining time, one or more of the low priority items may be discussed.

Write Up

Write up should include

- a concise statement of the problem
- a balanced discussion of the pro and con issues
- a proposed resolution/product
- a discussion of the intended product and how the product is to be implemented (i.e., a change to the Rule or other existing document, a new document, changes to the web page, etc.)
- an expected completion date

Non-Technical Breakout

- Agreements: (Continues the Supplemental Review discussion of the PG&E customer exception, above.) PG&E has three agreements now; may add changes to allow negotiated requirements. PG&E does not plan to develop an Inadvertent Export Agreement (though SCE & SDG&E have them). Question is how to hold customer/3rd party to non-export if there is no hardware, i.e. a software solution? Could a Special Agreement be developed? What about the problem of having to file a deviation for each change to an Generator Facility Interconnection Agreement? What latitude exists? SCE says there's no need; Rule 21 is functional, not technology-specific. Werner B. agrees that no change is needed to the agreements or Rule 21 to accommodate it.
- Net Generation Output Metering: Will PG&E require utility ownership or not? New statement from PG&E [paraphrase]: "PG&E will NOT allow 3rd party ownership until all issues of the metering are covered in a new proceeding and adopted by the Commission (PUC)." CAC/EPUC is comfortable with introducing this issue into a new proceeding, as long as parties differing positions are noted.
- Review and Prioritize the Bin List DRAFT.

California Rule 21 Workgroup Non-Technical Issues Bin List

Last Update: March 16, 2003

Active Issues

Priority	Issue	Location	Champion	Due Date
high	Export of Power – partially handled in tech		Tom D. and	
Č	group; policy: a. is export allowed? 1.NEM;		Werner B.	
	2. Power Purchase Agreement; 3. what about			
	biogas (expanded net metering)? b. what is			
	the difference between the utilities? Tom D.			
	suggests 3 types: 1. incidental; 2. inadvertent;			
	3 intentional:			

Priority	Issue	Location	Champion	Due Date
	Rule 21 Sections I & J – after tech group			Oct 1,
	gives us I & J, non-tech group will ensure			2003—
	consistency language;			but it
				depends
				on tech
				grp
	Rule 21 Section G – Dispute resolution			
	review/revise? Rule 10 lays out complaint			
	resolution language already; call it inactive			
	for now.			0 14
	Rule 21 Section H		Edan	Oct 1, 2003
	Metering for Standby and Exit Charges –			
	Nora S. asks that these be put in a larger			
	proceeding. Scott suggests that these issues			
	be handled as information to the larger			
	proceeding			
High	Rule 21 and Net Metering Tariffs over 10 kW		Jerry J.	
	and Net Metering for Digesters – Add a new			
	Section K			
High	List of Policy issue recommendations		Scott T. &	April 30,
	1. Metering for standby		Nora S.	2003
	2. Changes to Rule 21 interconnect fees based			
	on Utility Cost Data			
	3. etc		T T	
	Process improvements based on		Jerry J.	
High	Interconnection cost data collected		Mike I.	
High	Revision of Application form Issues in related proceedings affecting Rule		Werner B.	
	21		weiner B.	
	Future Cost tracking		Tom D.	
High	CPUC Proceeding on DG – R99-10-025		Pat A.	
	D-03-02-068 (R21 group to address			
	paragraphs 3,7,8,10,12) (Regarding DG as			
	alternative to distribution system upgrades			
	and other issues)			

Inactive or Informational Issues

Issue
FERC ANOPR on DG
Updates on Monitoring Program
to be handled in tech group
Updates on DG Applications to IOUs moved to previous list
Lessons Learned –Current events, hot topics, etc

- Process Discussion for Resolving Metering Requirements Issue Shifted to the new DG proceeding.
- Development of Net Energy Metering Language (New Section to Rule 21)
 PG&E has an internal task force to develop internal Handbook on Enet, Expanded Enet, including interconnection requirements for these programs. PG&E suggests that these should be included (in some consensus form) as Section K (Standard Enet) and Section L (Expanded Enet) in Rule 21. Jerry J. has lifted draft language from the draft Handbook to begin the discussion in the Rule 21 group. The draft handed out Section K is 7 pages long including process and technical requirements; the Section L is 3 pages, process only. The technical requirements for proposed Section L are 30-40 pages; Jerry suggests not including these.

Rule 21 is forced to deal with export; it is the only difference between NEM and regular Rule 21 projects (with the exception of Qualified Facilities cogen <100kW). Whether or not to allow export is a non-tech issue; so the non-tech group is dealing with it. A recommendation was approved to discuss this in the combined group session next meeting.

 Potential Changes to Application Forms Not discussed for lack of time.

Technical Breakout

- Review and prioritize the Bin List
- Act on Priority 1 Issues

California Rule 21 Workgroup Technical Issues Bin List

Last Update: 19 March 2003

Active Issues

Priority	Issue	Location	Champion	Due
High	Disconnect switch requirements	SupRev	Lacy	5/30/03
High	Nominal voltage – Definition; Use of 120V,	SupRev	Edds	5/30/03
	nominal vs typical vs average; relay settings			
High	Modify Export Screen (Clarification of	Rule 21	Whitaker	5/30/03
	Option 3 of the Export Screen, Change Rule			
	to Not allow Export, except where specifically			
	allowed; do we include Net-metered issues			
	here?)			
High	Inadvertent/Incidental Export	SupRev	Cook	5/30/03
High	Clarification of Anti-Islanding test for	TBD	Whitaker	
	synchronous and induction machines			
High	Clarify issue of "utility-approved" protective	SupRev	Vaziri/	
	function/equipment Define Requirements for		Whitaker	
	relays (for non-certified equipment)			
Low	Bibliography (electronic copies when	Web Page	Gardner	On-going
	available for group distribution)			

Priority	Issue	Location	Champion	Due
Low	Technical aspects of metering (e.g., Net	TBD	Mazy	
	Generation Output) Need input from non-tech			
Low	Networks	TBD	Skeen	
Low	Modify Section D.1.h	Rule 21	Mazy	
Low	Clarification of non-islanding, anti-islanding,	TBD	Whitaker	
	active anti-islanding, positive anti-islanding			

Inactive Issues

133463
Issue
Review/adopt IEEE 1547 requirements
Review/adopt FERC small gen requirements
Loss of Synchronization Requirements
Test and Certification: Synch/Ind. Machine tests. Clarification of Anti-
Islanding test for synchronous and induction machines
Clarification of use of transfer switch package in D.1.b Clarification of
the 2 second allowance in J.7.a(3) method 2 versus 1 second for
Momentary parallel
Clarification in I.3.b(2) that the reverse or minimum power relay does
not have to be at the PCC, to allow for eligible and non-eligible
generators on the same service account, as required in the proposed
decision on R95-10-025, issued 1/10/03
Define the term "promptly" in D.3.b(2) (2 seconds?)
Distinguish Rule 21 Certified equipment list from other lists: Non Tech
(change application/web page)
Solicit other suggested changes to Rule 21
Define the probability of islanding
Revised/upgrade Certification/decertification requirement

Completed Issues

Issue	Location	Completed
Disclaimer on SupRev Web page	Sup Rev	4 Feb 03

Minutes prepared by:

